

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
23 June 2005 (23.06.2005)

PCT

(10) International Publication Number  
**WO 2005/055930 A2**

(51) International Patent Classification<sup>7</sup>: **A61K**

(21) International Application Number:  
PCT/US2004/040234

(22) International Filing Date: 2 December 2004 (02.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/526,664 3 December 2003 (03.12.2003) US

(71) Applicant (for all designated States except US): **UNIVERSITY OF ROCHESTER** [US/US]; 518 Hylan Building, Rochester, NY 14627 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FAY, Philip, J.** [US/US]; 43 Split Rock Road, Pittsford, NY 14534 (US). **WAKABAYASHI, Hironao** [JP/US]; 136 Greystone Lane #3, Rochester, NY 14618 (US).

(74) Agents: **MERKEL, Edwin, V.** et al.; Nixon Peabody LLP, Clinton Square, P.O. Box 31051, Rochester, NY 14603-1051 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RECOMBINANT FACTOR VIII HAVING INCREASED SPECIFIC ACTIVITY

(57) Abstract: The present invention relates to recombinant factor VIII having a specific activity that is higher than that of the corresponding wild-type factor VIII. The present invention also relates to methods of making and using the recombinant factor VIII. The present invention also relates to an isolated nucleic acid molecule that encodes the recombinant factor VIII, as well as DNA expression systems and host cells containing the isolated nucleic acid molecule.



**WO 2005/055930 A2**